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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,130	08/08/2003	Janel Lanphere	01194-465001 / 03-347	3843
26161	7590	11/28/2006	EXAMINER	
FISH & RICHARDSON PC			LE, HOA T	
P.O. BOX 1022			ART UNIT	
MINNEAPOLIS, MN 55440-1022			PAPER NUMBER	
			1773	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/637,130	Applicant(s) LANPHERE ET AL.	
	Examiner H. T. Le	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-30 and 41-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-30 and 41-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. Claims 1-8, 11, 13, 14, 18-30, 41-45, 48-51, and 54-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Mangin (WO 01/66016).*

Claims 1-8: Mangin teaches an embolic particle comprising polyvinyl alcohol (PVA). See page 4, lines 5-7 and 29-30. The particle has particle size of from 355 to 500 μm . See page 7, lines 20-22. The particle contains voids on the surface and in the interior region wherein large voids are concentrated in the interior region. See figure 1B. Because large voids are concentrated in the interior region, the density of the surface region must be larger than that of the interior region. In addition, because of the larger void concentration, the interior region would have larger average pore size than the surface of the particle. In addition, the process of making the particle involving oil-in-water emulsification and incubation of the emulsification to leech out the soluble material (page 8, lines 17-25) inherently results in larger pores generated in the interior region than in the surface region.

Claims 13-14: The particle is spherical and spheroidal (page 7, lines 15-17); therefore it intrinsically has a sphericity of at least 0.9 and retains the same sphericity after compaction because of its spheroidal shape.

Claim 11: See page 12, lines 28-36.

* Copy provided by Applicant.

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Claim 12: The particle comprises mostly PVA and has a volume porosity of 20-50% or 50-90% (page 8, lines 9). Thus the particle is expected to have the density within the claimed range.

Claims 18-19: PVA is substantially insoluble in DMSO and no animal-derived compounds were used to form the particle.

Claims 20-21 and 48-51: See rejection to claims 1-8.

Claims 22-30 and 54-58: See page 11, lines 25-36 and page 14, lines 33-36 in combination with the rejection to claims 1-8 above.

Claims 41-45: Mangin teaches an embolic particle comprising alginate, a polysaccharide. See page 4, lines 5-7 and 29-30. The particle has particle size of from 355 to 500 μm . See page 7, lines 20-22. The particle contains voids on the surface and in the interior region wherein large voids are concentrated in the interior region. See figure 1B. Because large voids are concentrated in the interior region, the density of the surface region must be larger than that of the interior region. In addition, because of the larger void concentration, the interior region would have larger average pore size than the surface of the particle. In addition, the process of making the particle involving oil-in-water emulsification and incubation of the emulsification to leech out the soluble material (page 8, lines 17-25) inherently results in larger pores generated in the interior region than in the surface region.

Claim Rejections - 35 USC § 103

3. Claims 12, 15-17, 46, 47, 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangin (WO 01/66016) as applied to claims 1-8, 13, 14, 18-30, 41-45, 48-51, and 54-58 above, and further in view of the discussion below.

Mangin discloses the claimed invention as set forth above. Mangin does not explicitly report the density of the particle. However, such particle density would have been obvious because the density range as claimed is typical for an embolic particle. With regard to the proportion of polysaccharide in the particle, such range would have been obvious through routine experimentation.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8, 11-30 and 41-58 have been considered but are moot in view of the new ground of rejection as set forth above.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



H. T. Le
Primary Examiner
Art Unit 1773

October 28, 2006